OMB Control No.: 2127-0004

# Part 573 Safety Recall Report

# 16V-192

**Manufacturer Name:** Tesla Motors, Inc.

**Submission Date:** APR 05, 2016 NHTSA Recall No.: 16V-192

Manufacturer Recall No.: SB-16-13-003



#### **Manufacturer Information:**

Manufacturer Name: Tesla Motors, Inc.

Address: 3500 Deer Creek Road Palo Alto CA 94304

Company phone: 650-413-4000

## **Population:**

Number of potentially involved: 2,666 Estimated percentage with defect: 3

### **Vehicle Information:**

Vehicle: 2016-2016 Tesla Model X Vehicle Type: LIGHT VEHICLES

**Body Style: SUV** Power Train: NR

Descriptive Information: Model year 2016 Tesla Model X Electric Vehicles

Production Dates: SEP 29, 2015 - MAR 30, 2016

VIN (Vehicle Identification Number) Range

End: NR ☐ Not sequential VINs Begin: NR

#### **Description of Defect:**

Description of the Defect: Some third row seat recliner mechanisms, which were provided to Tesla by an outside supplier, may slip under high loads, allowing forward movement of the seat back. This may result in failure of the vehicle to comply with FMVSS 207 and an increased risk of injury in certain types of accidents.

> The third row of the Model X consists of two seats. Each seat contains two recliner mechanisms, one on each side of the seat. When released, these recliners allow the seat back to fold forward. Model X third row seats had successfully passed all U.S. seat strength tests prior to commencing delivery of Model X in the U.S. However, a seat recliner unexpectedly slipped while Tesla was performing additional European seat strength tests prior to commencing deliveries of Model X in Europe.

The failure condition has not been reported in any vehicles and has not resulted in any injuries.

FMVSS 1:207 - Seating systems

FMVSS 2:NR

Description of the Safety Risk: If an occupied third row seat exhibits the condition, and the vehicle is involved

in a severe collision, the seat back could exhibit excessive forward movement, increasing the likelihood of injury. Tesla is not aware of any instances where this or anything similar has occurred.

Description of the Cause: Variations in recliner manufacturing by Tesla's supplier can lead to insufficient tooth engagement, which results in the recliner failing to meet the required holding torque specification.

Identification of Any Warning that can Occur: None.

# **Supplier Identification:**

**Component Manufacturer** 

Name: Futuris

Address: 6601 Overlake Place

Newark CALIFORNIA 94560

**Country: United States** 

### **Chronology:**

On January 10, 2016, while performing ECE R17 seat testing on Model X third row seats, the outboard recliner of a third row seat slipped at 80% of load required by the test, resulting in failure of the seat to remain in its adjusted position. Prior to this test, Tesla had performed 15 seat strength tests including FMVSS 207 and ECE R17 on Model X third row seats without a single recliner failure. Following the anomalous test result, Tesla immediately launched an investigation to determine if the test failure was the result of incorrect test procedure or a defective part.

On January 25, 2016, while performing ECE R17 testing on a prototype third row seat frame, the outboard seat recliner slipped at 73% of the load required by the test.

Between late January and late March 2016, component level testing was performed by Tesla, the seat supplier, and the recliner supplier in order to investigate the potential for performance variability in recliners. Although this testing found that no single factor was responsible for the observed test failures, the testing resulted in recliner design changes and improved quality control by the supplier. Seats with this new recliner were installed in production vehicles beginning March 26, 2016.

On March 30, 2016, while performing an FMVSS 207 seat test, the outboard recliner of a pre-countermeasure seat slipped at 77% of the load required by the test. Tesla decided to initiate a recall campaign to replace all pre-containment third row seats with seats that have the recliner design changes and improved quality control by the supplier. Although no seat recliner failures have been reported in the field, the Company has elected to conduct this recall to ensure the absolute safety of our customers.

## **Description of Remedy:**

Description of Remedy Program: Tesla will replace all affected third row seats with seats built using recliners featuring design changes and improved quality control by the supplier.

How Remedy Component Differs from Recalled Component : The remedied seats contain new recliners that

The information contained in this report was submitted pursuant to 49 CFR §573

feature geometry changes to the lock gear, increased holder diameter, increased cam spring stiffness, and additional part heat treatment. These design changes and improved quality control by the supplier ensure proper recliner performance.

Identify How/When Recall Condition was Corrected in Production : Seats with recliners featuring design changes and improved quality control by the supplier were first installed in production vehicles on March 26, 2016.

#### **Recall Schedule:**

Description of Recall Schedule: All Tesla stores and service centers will be notified on or about April 7, 2016.

Customers will be sent a courtesy email alerting them to the recall on or about April 7, 2016. Owner notification letters will be mailed out following NHTSA  $\,$ 

approval.

Planned Dealer Notification Date: APR 07, 2016 - APR 08, 2016

Planned Owner Notification Date: APR 07, 2016 - APR 30, 2016

\* NR - Not Reported